AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 - 35. (Cancelled)

36. (Currently amended) A non-human transgenic mammal,[which comprises] comprising an endogenous IgH locus which is modified by [replacing] replacement of a switch sequence Sμ with [all or a part of] a transgene comprising ~~consisting of a Cα gene for~~ a human class A immunoglobulin heavy chain constant region gene Cα or a segment of said Cα gene ,comprising at least an exon encoding the CH3 domain and a membrane exon.

37. (Previously presented) The non-human transgenic mammal of claim 36, which is homozygous for said modified IgH locus.

38. (Currently amended) The non-human transgenic mammal of claim 36, wherein said endogenous IgH locus is modified by replacement of the switch sequence Sμ, with the entire Cα gene.

39. (Currently amended) The non-human transgenic mammal of claim 36, wherein said endogenous IgH locus is modified by replacement of the switch sequence Sμ with the segment of the Cα gene comprising the exon encoding the CH3 domain and the membrane exon.

40. (Currently amended) The non-human transgenic mammal of claim 36, wherein said Cαa gene is the Cα1 gene.

41. (Previously presented) The non-human transgenic mammal of claim 36, which further comprises another transgene encoding a human immunoglobulin light chain.

42. (Currently amended) The non-human transgenic mammal of claim 41, wherein said light chain is a kappa light chain.

43. (Currently amended) The non-human transgenic mammal of claim 41~~2~~, wherein said ztransgene which encodes a human immunoglobulin kappa light chain, further comprises the intronic activator Eμ upstream of a DNA sequence encoding said human immunoglobulin kappa light chain and the palindrome *hs3a/hs1,2/hs3b* downstream of said DNA sequence.

44. (Previously presented) The non-human transgenic mammal of claim 43, wherein said transgene is under the control of the promoter of the human immunoglobulin heavy chain.

45. (Previously presented) The non-human transgenic mammal of claim 41, which is dizygous for said transgene.

46. (Currently amended) The non-human transgenic mammal of claim 41, further comprising~~which possesses~~ an inactivated endogenous immunoglobulin kappa light chain locus ~~of the inactivated kappa chain~~.

47. (Currently amended) The non-human transgenic mammal of claim 46, which is homozygous for said inactivated endogenous immunoglobulin kappa light chain locus ~~of the inactivated kappa gene~~.

48. (Currently amended) The non-human transgenic mammal of claim 36, further comprising ~~which possesses a gene encoding~~ ~~the~~ an inactivated endogenous J chain gene.

49. (Currently amended) The non-human transgenic mammal of claim 48, which is homozygous for said inactivated endogenous J chain gene ~~encoding the inactivated J chain gene~~.

50. (Currently amended) The non-human transgenic mammal of claim 48, which further comprises another transgene encoding a human immunoglobulin J chain gene.

51. (Previously presented) The non-human transgenic mammal of claim 36, which is a transgenic mouse.

52. (Currently amended) A transgenic mouse of claim 51, which comprises:
a) an endogenous IgH locus modified by replacement of the switch sequence Sμ with the entire ~~Cα1 gene for a~~ human class A immunoglobulin heavy chain constant region gene Cα1, and

b) a human kappa light chain transgene ~~complete Vκ gene~~ comprising ~~rearranged~~ a VκI gene rearranged with a Jκ5 gene, ~~the~~ a Jκ-Cκ intron and a Cκ gene, under the transcriptional control ~~of the promoter~~ of the human heavy chain promoter (pVH), the intronic activator Eμ upstream of said promoter and the palindrome *hs3a/hs1,2/hs3b* downstream of said Cκ gene.

53. (Currently amended) A homologous recombination targeting vector, which comprises a human class A immunoglobulin heavy chain constant region gene Cα ~~gene for a human class A immunoglobulin~~ or a segment of ~~the~~ said Cα gene comprising at least an exon encoding the ~~a~~ CH3 domain and a membrane exon, flanked by fragments of sequences of the IgH locus from a non-human mammal which are adjacent to a switch sequence Sμ ~~sequence~~.

54. (Previously presented) The targeting vector of claim 53, which comprises a cassette for expressing a selection marker, adjacent to said Cα gene or to a segment of said gene.

55. (Previously presented) The targeting vector of claim 54, wherein said expression cassette is flanked by site-specific recombination sequences.

56. (Currently amended) The targeting vector of claim 55~~[4]~~, wherein said sequences are LoxP sequences of Cre recombinase.

57. (Currently amended) The targeting vector of claim 53, wherein said fragments of sequences of the IgH locus which are adjacent to the switch sequence Sμ ~~sequence~~ are fragments of the mouse IgH locus~~of murine origin~~.

58. ((Currently amended) The targeting vector of claim 57~~[6]~~, wherein ~~the Cα gene or the segment of said gene is flanked, in 5' and in 3' respectively, by~~ said fragments consist~~[ing]~~ of the sequences SEQ ID NO: 7 and SEQ ID NO: 8, corresponding respectively to positions 131281 to 136441 and 140101 to 145032 in the sequence of murine chromo~~[e]~~some 12 (accession number AC073553 in the EMBL/GenBank database).

59. (Previously presented) An embryonic cell of a nonhuman mammal, modified with the targeting vector of claim 53.

60 Withdrawn) A method for preparing humanized class IgA antibodies or fragments thereof, which comprises at least the following steps:

a) immunizing a non-human transgenic mammal of claim 36, and
b) producing humanized class IgA antibodies or fragments of the antibodies from serum, secretions or B lymphocytes of said non-human transgenic mammal sacrificed beforehand.

61. (Withdrawn) The method of claim 60, wherein the non-human transgenic mammal is a transgenic mouse.

62. (Withdrawn) A humanized class IgA antibody produced by the method of claim 60, which comprises a chimeric heavy chain in which the constant domains are of human origin and a human light chain in which the variable domain is encoded by VκI-Jκ5.

63. (Withdrawn) A fragment of a humanized class IgA antibody of claim 62, which comprises a fragment of said heavy and light chains.

64. (Withdrawn) The humanized class IgA fragment of claim 63, which is selected from the group consisting of the Fab, Fab'2 and Fc fragments.

65. (Withdrawn) A medicament, which comprises a humanized class IgA antibody of claim 62, or a fragment of the antibody of claim 63.

66. (Withdrawn) A diagnostic reagent, which comprises a humanized class IgA antibody of claim 62, or a fragment of the antibody of claim 63.

67. (Withdrawn) An immunogenic or vaccine composition, which comprises at least one humanized class IgA antibody of claim 62, or a fragment of the antibody of claim 63, combined with an antigen.

68. (Withdrawn) A pharmaceutical composition, which comprises combining at least one humanized class IgA antibody of claim 62, or a fragment thereof of claim 63, with an active ingredient.

69. (Withdrawn) A method of preparing a reagent, which comprises combining at least one humanized class IgA antibody of claim 62, or a fragment thereof of claim 63, with an active ingredient.

70. (Withdrawn) A method of treating infectious diseases or cancer, which comprises administering at least one humanized class IgA antibody of claim 62, or a fragment thereof of claim 63, to a mammal in need thereof.

71. (Withdrawn) The method of claim 70, wherein the mammal is a human.

72. (Withdrawn) The method of claim 70, for treating infectious diseases.

73. (Withdrawn) The method of claim 70, for treating cancer.